TYPE DESIGNATION	E1PF480Y/277VSY01	E1PF480Y/277VSY10	E1YM480/277VS10	E1UM230V01	E1IM10AACL10
ORDER INFORMATION					
Art. No. single package	1340306	1340305	1340409	1340101	1340200
FUNCTIONALITY	phase monitor	phase monitor	3-phase voltage monitor	1-phase voltage monitor	1-phase current monitor
Phase failure, Loss	■	■			
SEQ ... Phase sequence	■	■	■		
ASYM ... Asymmetry, Balance	■	■			
O ... Over					■
U ... Under			■	■	■
W ... Window			■	■	■
SWITCHING THRESHOLD					
Maximum			75 to 110% of U_N	80 to 120% of U_N	10 to 100% of I_N
Minimum			65 to 100% of U_N	75 to 115% of U_N	5 to 95% of I_N
Asymmetry	5 to 25%, OFF	5 to 25%, OFF	-	-	-
MEASURING CIRCUIT					
Measuring variable	3~ voltage AC sinus	3~ voltage AC sinus	3~ voltage AC sinus	1~ voltage AC/DC sinus	1~ current AC sinus
Measuring input	U_N= 480/277V AC	U_N= 480/277V AC	U_N= 480/277V AC	24V AC/DC and 230V AC	10A AC
SUPPLY CIRCUIT					
Supply voltage	-10% to +10% of U_N 432V to 528+V AC	-10% to +10% of U_N 432V to 528V AC	-35% to +10% of U_N 312V to 528V AC	-25% to +20% of U_N 18 to 29V AC/DC; 173 to 276V AC	-15% to +15% of 230V AC 195V to 265V AC
Frequency range	48 – 63Hz	48 – 63Hz	48 – 63Hz	48 – 63Hz or DC	48 – 63Hz
TIME CIRCUITS					
Tripping delay (DELAY)	fixed, approx. 100ms	0.1 – 20s	0.1 – 10s	-	0,1 – 10s
OUTPUT CIRCUIT					
Contact	SPDT	SPDT	SPDT	SPDT	SPDT
Switching capacity	1250VA (5A / 250V AC)	1250VA (5A / 250V AC)	1250VA (5A / 250V AC)	1250VA (5A / 250V AC)	1250VA (5A / 250V AC)
DESIGN					
Dimensions (W×H×D)	0.69×2.43×2.56 in (17.5×87×65 mm)				
Certificates	CE, cULus, EAC				

TYPE DESIGNATION	G2PF400VS02	G2PF230VS02	G2PF115VS02	G2PM400VSY20	G2PM230VSY20	G2PM115VSY20
ORDER INFORMATION						
Art. No.	2390000	2390001	2390002	2390505	2390512	2390506
FUNCTIONALITY	phase monitor			3-phase voltage monitor		
U ... Under				■	■	■
W ... Window				■	■	■
SEQ ... Phase sequence	■	■	■	■	■	■
Phase failure	■	■	■	■	■	■
ASYM ... Asymmetry	■	■	■	■	■	■
SWITCHING THRESHOLD						
Maximum	-			-20 to +30 % of U_N		
Minimum	-			-30 to +20 % of U_N		
Asymmetry	fixed, typ. 30 %			5 to 25 %, OFF		
MEASURING CIRCUIT						
Measuring variable	3(N)~ voltage AC sinus			3(N)~ voltage AC sinus		
Measuring input	U_N = 400/230 V AC	U_N = 230/132 V AC	U_N = 115/66 V AC	U_N = 400/230 V AC	U_N = 230/132 V AC	U_N = 115/66 V AC
Frequency range	48–63 Hz			48–63 Hz		
SUPPLY CIRCUIT						
Supply voltage	= U_N			24 to 240 V AC/DC		
TIME CIRCUITS						
Start-up surpression time (START)	fixed, max. 500 ms			-		
Tripping delay (DELAY)	fixed, max. 350 ms			0.1 – 10 s		
OUTPUT CIRCUIT						
Contacts	DPDT			DPDT		
Switching capacity	1250 VA (5 A / 250 V AC)					
DESIGN						
Dimensions (W×H×D)	0.88×3.54×4.25 in (22.5×90×108 mm)					
Certificates	CE, cULus, EAC					

TYPE DESIGNATION	G2UM300VL20	G2IM5AL20	G2IM10AL20	G2JM5AL20
ORDER INFORMATION				
Art. No.	2390304	2390411	2390410	2390801
FUNCTIONALITY	1-phase voltage monitor	1-phase current monitor	1-phase current monitor	3-phase current monitor
O ... Over	■	■	■	■
U ... Under	■	■	■	■
W ... Window	■	■	■	■
SEQ ... Phase sequence				
Phase failure				
ASYM ... Asymmetry				
+LATCH ... Error memory	■	■	■	■
SWITCHING THRESHOLD				
Maximum	10 to 100 % of U_N	10 to 100 % of I_N	10 to 100 % of I_N	10 to 100 % of I_N
Minimum	5 to 95 % of U_N	5 to 95 % of I_N	5 to 95 % of I_N	5 to 95 % of I_N
Asymmetry	-	-	-	-
MEASURING CIRCUIT				
Measuring variable	voltage AC/DC AC sinus	current AC/DC AC sinus	current AC/DC AC sinus	current AC AC sinus
Measuring input	30 / 60 / 300 V AC/DC	20 mA / 1 A / 5 A AC/DC or CT	100 mA / 1 A / 10 A AC/DC or CT	5 A AC or CT
Frequency range	16,6 – 400 Hz or DC	16,6 – 400 Hz or DC		16,6 – 400 Hz
SUPPLY CIRCUIT				
Supply voltage	24 to 240 V AC/DC	24 to 240 V AC/DC	24 to 240 V AC/DC	24 to 240 V AC/DC
TIME CIRCUITS				
ON delay	-	-	-	-
Start-up surpression time (START)	0 – 10 s	0 – 10 s	0 – 10 s	0 – 10 s
Tripping delay (DELAY)	0.1 – 10 s	0.1 – 10 s	0.1 – 10 s	0.1 – 10 s
OUTPUT CIRCUIT				
Number of switch contacts	DPDT	DPDT	DPDT	DPDT
Switching capacity	1250 VA (5 A / 250 V AC)			
DESIGN				
Dimensions (W × H × D)	0.88 × 3.54 × 4.25 in (22.5 × 90 × 108 mm)			
Certificates	CE, cULus, EAC			

TYPE DESIGNATION	G2PM690VSY20	G2PU690VS20	G2TFKN02	G2LM20
ORDER INFORMATION				
Art. No.	2390517	2390507	2390110	2390201 (24 V AC) 2390202 (110 V AC) 2390200 (230 V AC)
FUNCTIONALITY	3- phase voltage monitor	3-phase loss monitor	temperature monitoring (PTC)	level monitor for conductive liquids
U ... Under	■	■		
W ... Window	■			
SEQ ... Phase sequence	■	■		
Phase failure	■	■		
ASYM ... Asymmetry	■	■		
Temperature monitoring (PTC)			■	
Short circuit monitoring (PTC)			■	
Zero-voltage latch (PTC)			■	
Test function (PTC)			■	
Pump up				■
Pump down				■
SWITCHING THRESHOLD				
Maximum	55 to 115% of U_N	-	≥ 3.6 kΩ (switch-off resistance)	-
Minimum	50 to 110% of U_N	180 to 690 V AC	≤ 1.6 kΩ (switch-on resistance)	-
Asymmetry	5 to 25%, OFF	fixed, 25%	-	-
MEASURING CIRCUIT				
Measuring variable	3~ voltage AC sinus	3~ voltage AC sinus	temperature	liquid level via conductive probes
Measuring input	3~ 208-690 V AC	180-690 V AC	-	0.25 to 100 kΩ
SUPPLY CIRCUIT				
Supply voltage	= measuring voltage 177 V to 794 V AC	= measuring voltage 177 V to 794 V AC	24 to 240 V AC/DC	24 V AC 110 V AC 230 V AC
Frequency range	20-70 Hz	20-70 Hz	-	-
TIME CIRCUITS				
Start-up surpression time (START)	-	-	-	-
Tripping delay (DELAY)	0.1 – 10 s	0.1 – 10 s	-	0.5 – 10 s
OFF delay	-	-	-	0.5 – 10 s
OUTPUT CIRCUIT				
Contacts	DPDT	DPDT	DPDT	DPDT
Switching capacity	1250 VA (5 A / 250 V AC)			
DESIGN				
Dimensions (W × H × D)	0.88 × 3.54 × 4.25 in (22.5 × 90 × 108 mm)			
Certificates	CE, cULus, EAC			

Please find probes matching E3LM-, G2LM-, V4LM-series on page 35 (chapter: Add-ons).

TYPE DESIGNATION	V2PF480Y/277VSY01	V2PM400Y/230VS10	V2UM230V10	V4PF480Y/277VSYTK02
ORDER INFORMATION				
Art. No. screw terminal	2100000	2100500	2100300	2104200
Art. No. packaging unit (10 pcs)	2100000A	-	-	-
FUNCTIONALITY	phase monitor	3- phase voltage monitor	1- phase voltage monitor	phase and temperature monitor
Phase failure, Loss	■	■		■
SEQ ... Phase sequence	■	■		■
ASYM ... Asymmetry, Balance	■			■
U ... Under		■	■	
W ... Window		■	■	
Wemperature monitoring (PTC)				■
SWITCHING THRESHOLD				
Maximum	-	75 to 130% of U_N	80 to 115% of U_N	-
Minimum	-	70 to 125% of U_N	75 to 110% of U_N	-
Asymmetry	5 to 25%, OFF	-	-	5 to 25%, OFF
MEASURING CIRCUIT				
Measuring variable	3~ voltage A s	3~ voltage AC sinus	1~ voltage AC/DC AC sinus	3~ voltage AC sinus temperature
Measuring input	U_N= 480/277V AC	U_N= 400/230V AC	U_N= 24V AC/DC or 230V AC	U_N= 480/277V AC
SUPPLY CIRCUIT				
Supply voltage	-10% to +10% of U_N 432/250V to 528/305V AC	-35% to +35% of U_N 260/250V to 540/310V AC	-30% to +30% of U_N 17V to 31V AC/DC; 161V to 299V AC	-10% to +10% of U_N 432/250V to 528/305V AC
Frequency range	48 – 63 Hz	16.6 – 400 Hz	16.6 – 400 Hz or DC	48 – 63 Hz
TIME CIRCUITS				
ON delay	approx. 400 ms	approx. 200 ms	approx. 300 ms	approx. 500 ms
Tripping delay (DELAY)	< 250 ms	0.1 – 10 s	0.1 – 10 s	approx. 250 ms
OUTPUT CIRCUIT				
Contact	SPDT	SPDT	SPDT	DPDT
Switching capacity	2000VA (8A / 250V AC)	2000VA (8A / 250V AC)	2000VA (8A / 250V AC)	2000VA (8A / 250V AC)
DESIGN				
Dimensions (W×H×D)	0.88×2.64×2.99 in (22.5×67×76 mm)			1.76×2.64×2.99 in (45×67×76 mm)
Certificates	CE, cULus, EAC			




TYPE DESIGNATION	V2TF01	V2IM10AL10	V4IM100AL20	V4IM35AL20	V4LM4S30
ORDER INFORMATION					
Art. No. screw terminal	2100100	2100400	2104401(100A)	2104402 (35A)	2104500
FUNCTIONALITY	temperature monitor	1-phase current monitor	1-phase current monitor	1-phase current monitor	liquid level monitor
O ... Over		■	■		10 functions selectable via rotary switch – for function overview pls. refer to page 21
U ... Under		■	■	■	
W ... Window		■	■	■	
2MAX ... Maximum monitoring			■	■	
MM ... Min. and max. monitoring			■	■	
+LATCH ... Error memory			■	■	
Temperature monitoring (PTC)	■			■	
Short circuit monitoring (PTC)	■				
SWITCHING THRESHOLD					
Maximum	≥ 3.6 kΩ (switch-off resistance)	10 to 100 % of I_N	10 to 100 % of I_N	10 to 100 % of I_N	sensitivity: 10 kΩ - 500 kΩ Vsense: 20, 40, 60, 80, 100 %
Minimum	≤ 1.6 kΩ (switch-on resistance)	5 to 95 % of I_N	5 to 95 % of I_N	5 to 95 % of I_N	sensitivity: 250 Ω – 12.5 kΩ Vsense: 20, 40, 60, 80, 100 %
MEASURING CIRCUIT					
Measuring variable	temperature	1~ current AC/DC AC sinus	1~ current AC/DC AC sinus	1~ current AC/DC AC sinus	level via conductive probes
Measuring input	PTC	10 A AC/DC	100 A AC/DC	35 A AC/DC	low (L): 250 Ω – 12.5 kΩ high (H): 10 kΩ - 500 kΩ
SUPPLY CIRCUIT					
Supply voltage	24 – 240 V AC/DC -15 % to +10 %	AC: 110 - 240 V; DC: 24 - 240 V AC: -15 % to +15 % DC: -30 % to +30 %	24 - 240 V AC/DC AC: -15 % to +10 % DC: -30 % to +30 %	24 - 240 V AC/DC AC: -15 % to +10 % DC: -30 % to +30 %	24-240 V AC/DC AC: -10 % to +10 % DC: -25 % to +25 %
Frequency range	16.6 to 400 Hz or DC	16.6 to 400 Hz or DC	16.6 to 400 Hz or DC	16.6 to 400 Hz or DC	16.6 to 400 Hz or DC
TIME CIRCUITS					
ON delay	approx. 50 ms	approx. 300 ms	approx. 300 ms	approx. 300 ms	-
Start-up surpression time (START)	-	-	0 – 10 s	0 – 10 s	-
Tripping delay (DELAY)	-	0.1 – 10 s	0.1 – 10 s	0.1 – 10 s	-
Delay (measuring filter)	-	-	-	-	1-10s
OUTPUT CIRCUIT					
Contact	SPNO	SPDT	2 × SPDT	2x SPDT	3 × SPNO
Switching capacity	2000VA (8 A / 250 V AC)	2000VA (8A / 250 V AC)	2000VA (8 A / 250 V AC)	2000VA (8 A / 250 V AC)	1250VA (5 A / 250 V AC)
DESIGN					
Dimensions (W × H × D)	0.88 × 2.64 × 2.99 in (22.5 × 67 × 76 mm)		1.76 × 2.64 × 2.99 in (45 × 67 × 76 mm)		
Certificates	CE, cULus, EAC				

Please find probes matching E3LM-, G2LM-, V4LM-series on page 35 (chapter: Add-ons).